THE PLOUGH BOY.

BY HENRY HOMESPUN, JR.

"He that observeth the wind shall not sow; and he that regardeth the clouds shall not reap."—BUT—"He that tilleth his land shall have plenty of bread."—*Ecclesiastes.*

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SELECTIONS.

Parkes's Letter.

A LETTER TO THE FARMERS AND GRAZIERS OF GREAT-BRITAIN, TO EXPLAIN THE ADVANTAGES OF USING SALT IN THE VARIOUS BRANCHES OF AGRICULTURE, AND IN FEEDING ALL KINDS OF FARMING STOCK.—*By Samuel Parkes*, FLS. MRI. FSA.E. &C. &C.

London, Feb. 15th, 1819.

GENTLEMEN,

In consequence of a late enactment of the Legislature of Great-Britain in your favour, and of the share which I took in the preliminary measures for obtaining that enactment, I think it incumbent on me to invite your attention to the subject, by addressing to you, in this public manner, the following observations.

The facts which I shall lay before you are of that importance to your own interests, and the promulgation of them is so likely to promote the welfare of the whole country, that I should consider myself culpable if I omitted to give them the greatest possible publicity, or if I neglected to use my best endeavours to place them in that clear point of view which should enable you fully to understand and appreciate them.

The expediency of manuring arable and pasture lands with Salt, and of administering the same active and wholesome substance to your horses, sheep, and cattle, as a condiment for their food, and as an efficacious means of preserving them in health and vigour, will form the principal objects which I am anxious to point out for your consideration, and future practice.

After a candid and unprejudiced perusal of this Letter, you will, I trust, carefully examine the body of evidence which will be adduced in the Appendix, and then make such experiments upon your own estates, and with your own cattle, as are most likely to determine and convince you how far such a course of proceeding may be applicable in your own management.

The ever memorable SULLY, who was one of the greatest men France ever produced, used to say, that it ought to be the first maxim of a good government, to advance agriculture before manufactures, and to give to the latter only a secondary rank in the state—whereas, COLBERT, who was also a great minister, assigned to manufactures the first place in the economical order of his administration, and gave the utmost encouragement to the arts, from a persuasion that their prosperity would furnish the only means of working up the raw materials which his country produced. It is probable, however, that this eminent statesman would not have protected the arts at the expense of agriculture, if he had considered that the principal utility of manufactures in any country arises from the price which they afford to, and the market which they procure for, the products of the soil.

The immortal Sully, in vindication of the opinion which I have just quoted, used to say, that he had ever preferred the products of the soil, which could not easily be ravished from him, to those foreign conquests which occupy the attention of most governments, but which always excite resentment and jealousy. "A large, and an increasing produce of the land," said he, "ensures the liberty of the people, while it places foreigners in a sort of dependence; whereas the want of corn, the first necessary of life, gives a dependence upon foreigners, who can either furnish the commodity, or refuse it. The produce of the land," continues he, "cannot be consumed by strangers, but to the profit of the inhabitants, that is, by a traffic more advantageous than the possession of the corn itself—whereas the arts and manufactures may possibly be carried off by the artifices of rivals, and pass away, together with the artists themselves, into all the countries of the world."

If these latter sentiments are founded in truth and justice, and I believe they are, then every improvment in the agriculture or rural economy of these kingdoms may be considered to be an important national acquisition, and I shall be excused in not offering any apology for endeavouring to call your attention to a practice which is little known in our country, but which in some foreign states has invariably been attended with decided advantages as well as profit.

The value of common salt for agricultural purposes has been long known in Germany, in Poland, in Holland, in Flanders, and in all the provinces of the United States of America; it is therefore much to be lamented that the existing duties should so long have deprived the people of this country of the various benefits which they might have derived from this valuable native production.* The mineral substance of which we are speaking is found in this island in the greatest abundance, yet, by a mistaken policy, we have hitherto given it to strangers, and have allowed many thousands of acres of our own lands, which, by the free use of Salt, might have been rendered highly fertile and profitable, to remain nearly sterile, or at least in a state in which they will barely pay for the expense of their cultivation.

However, since the government has so far relaxed as to remit a great part of the duty on such Rock-Salt as shall forthwith be consumed in agriculture, or in feeding cattle, and as so much depends upon the manner in which this valuable boon is received by the country, it is desirable that the greatest extent of publicity should be given to the act of parliament; and that no agriculturist, not even the most humble gardener, should remain ignorant of the terms and conditions upon which he may now obtain so rich and useful a commodity as Rock-Salt.

Penetrated with the importance of the subject, and contemplating the variety of advantages which the landed interest must derive from the accomplishment of the measure, the act had no sooner passed than I determined to lay all the particulars before the public in the hope that these concessions of the legislature, together with the evidence which I should be enabled to offer in proof of the advantages to be derived from the use of Salt, would be amply sufficient to induce a large majority of the farmers of Great-Britain to acquire such a knowledge of the new regulations as would enable them, without delay, to avail themselves of all the benefits which the government has thus offered for their acceptance.

Having no private ends to answer, and expecting to derive no personal advantage whatever from the general adoption of this measure, I shall proceed to give you a simple outline of the general view which I have taken of the subject. It may, however, be necessary to premise, that my opinions thereon have been formed in consequence of a careful investigation of a great number of well-attested experiments, and from the perusal of that body of evidence which was delivered

* The value of Common Salt as a manure was known some hundred years ago by certain individuals in this country, but the high duties and other impediments have prevented its use becoming general.

in the year 1817 before the Lords of His Majesty's most Honourable Privy Council, at the Board of Trade ; and again in the spring of the following year, before a select committee of the House of Commons ; which committee was occupied from day to day, from the sixteenth of March to the fifteenth day of May, in questioning the witnesses, and in recording their respective testimonies upon this most important proposition.

From an attentive examination of all these documents, and from a dispassionate consideration of every thing which I have been able to collect upon this great object, I am decidedly of opinion that Rock-Salt, at the reduced duty of five pounds per ton, is by far the cheapest, the most efficacious, and the most convenient manure for arable and pasture land, that can possibly be obtained.

More than one hundred and fifty years ago, Sir Hugh Platt, an eminent writer of that day, speaks very decidedly of the benefits which might be derived from the practice of sprinkling Common Salt upon land, and calls it the *sweetest*, the *cheapest*, and the most *philosophical* marle of all others. He relates the case of a man, who, in passing over a creek on the sea-shore, suffered his sack of seed corn to fall into the water, and that it lay there until it was low tide, when, being unable to buy more seed, he sowed that which had lain in the salt-water ; and when the harvest time arrived he reaped a crop far superior to any in the neighbourhood. The writer, however, adds, that it was supposed the corn would not fructify in that manner unless it actually fell into the sea by chance ; and therefore, neither this man nor any of his neighbours ever ventured to make any further use of salt-water.

The same curious author tells us also of "a man who sowed a bushel of salt, *long since*, upon a small plot of barren ground on Clapham Common, and that to that day (the time when he was writing) it remained more fresh and green than any of the ground round about it.

The eminent Dr. Brownrigg, who wrote in the year 1648, in speaking of Common Salt, says " it is dispersed over all nature : it is treasured up in the bowels of the earth ; it impregnates the ocean ; it descends in rains ; it fertilizes the soil ; it arises in vegetables ; and from them is conveyed into animals ; so that it may well be esteemed the universal condiment of nature ; friendly and beneficent to all creatures endowed with life, whether it be vegetable or animal.

In some parts of Great-Britain, particularly in the neighborhood of the Salt-Works, the value of Common Salt, as a manure, is well known and acknowledged ; and it has lately been given in evidence before the select cummittee of the House of Commons, by a gentleman of the highest credit, that the farmers of Cornwall are so convinced of the value of Salt as a manure,* that whenever the waste Shlt that has been employed in curing fish is on sale, there is a violent contention among the occupiers of the land who shall obtain the largest share. The same gentleman informed the committee, that where wheat or barley has followed turnips, on land which has been salted, the ensuing crop has invariably escaped mildew, although that disease had effected all the corn upon land immediately adjoining, on which Salt had not been used.

The efficacy of Salt in destroying noxious weeds, grubs, worms, flies and insects, is well known in many districts, and those who are incredulous may very easily satisfy themselves by direct experiment. For instance, if a few common earth worms be taken out of the ground, and sprinkled with a little Salt, they will be seen to wreathe about for a few minutes, and then expire. Thus Salt does, as it were, perform two operations at once, for, by destroying the worms and the weeds, while the land lies fallow, it prepares the ground most effectually for the reception of corn or plants, before it can possibly take any effect upon the crop itself. And, besides this peculiar advantage, the extreme luxuriance and verdure which Common Salt gives to *grass* lands, when properly applied, would be so satisfactory to such farmers who would make use of it, and so convincing to all the neighbouring agriculturists of every description, that if only one or two gentleman in each district were to employ it in a few instances, I am certain this mode of top-dressing* would very soon engage the attention of every person in the empire who had even but a garden to manage and cultivate.

From the evidence which has already been collected upon this subject, it is obvious that a great portion of the land in this kingdom might by the proper use of Salt, be made to produce nearly double the amount of the present crops of grass as well as corn. How greatly this would serve the manufacturing, and indeed all other interests of the country, I need not attempt to explain to you. Moreover, by forcing the land with a sufficient portion of Salt, our crops would be brought to maturity much sooner than they now are,† a matter of considerable importance in the northern parts of this island, where much of the corn is frequently spoiled by the autumnal rains before it can be sufficiently dried by the sun and and wind to stack with safety. And in the hay harvest, should the farmer be induced, from the uncertainty of the weather to carry his hay too soon, a small quantity of Salt sprinkled upon each layer of the rick will prevent the hay from becoming mow-burned, as it is called, and when hay which has been thus treated is presented to horses and cattle, it will be preferred by them to that which has been put together in a more favorable season, and not treated with Salt.

The *cleanliness* of Rock-Salt as a manure is likewise another considerable advantage. In many cases this circumstance will be found to be very important, particularly in the grazing districts. It has repeatedly been observed, that if land be manured with dung *after* the hay has been carried off, the neat cattle will refuse to eat the eddish which grows upon such land. On the contrary, if a field be dressed with about two bushels of fine Salt instead of dung, soon after the hay is cut this inconvenience and loss will be avoided, and a large crop of aftergrass will be obtained, possessing such peculiar sweetness, that all kinds of cattle, as well as horses, will eat it with the utmost avidity.

The farmers, in some districts, are accustomed to steep their seed corn in lime water, and doubtless the practice is often useful : but I am decidedly of opinion that a strong brine, made by the solution of Rock-Salt in water, will be infinitely more efficacious. Crops of wheat are often reduced one half in value by a disease to which this kind of grain is very liable, called the *smut*, or *rust* ;* but when the seed has been properly prepared with Salt, this misfortune can never happen. It has also been proved by some public spirited individuals, who have made the necessary experiments, that the scab is never found upon potatoes which have grown upon land that has had a proper dressing of Common Salt.

In many parts of Flanders, but more particularly at Lisle, it is the practice to preserve the urine of those cattle that eat Common Salt with their food. This is preserved in appropriate reservoirs, and when the farmers apply it to a certain description has taught them to select, the effect, even without any other manure, is not only advantageous, but it is truly astonishing.

Enough, I presume, has now been offered to induce you to expect a satisfactory result from the application of Salt to your fields and meadows: I shall, therefore, at present, content myself with informing you, that in the Appendix you will find a list of the names of the gentlemen who have borne testimony to the efficacy of Salt as a manure, and likewise the evidence of a gentleman who has used Common Salt upon his own farm for many years, and has witnessed the use of brine upon the lands in his neighbourhood for forty years, with the greatest advantage ; and who came from a distant county on purpose to attend the select committee of the House of Commons, to report to them the substance of his experience for that very long period. You will also find there the proposals of the Board of Agriculture in London, and of the Highland Society of Scotland, both of which institutions are fully aware of the value of Rock-Salt in the cultivation of land ; for they have offered rewards to such persons as shall give them an account of the best experiments with this valuable mineral substance, in the different branches of farming, and general agriculture.

We proceed now to the second part of our subject, which relates to the application of Salt in feeding sheep and horses, and for assisting in fattening live stock. Here, however, I shall merely enumerate the several advantages which appear to have resulted from the practice, and shall

* There is also a practice in Cornwall of manuring lands with sea sand for the sake of the Salt that it contains; and so very efficacious is this found to be, that a writer, ninety years ago, computed the money laid out in that and the adjoining county for sea-sand to amount to thirty-two thousand pounds per annum; and so much has this practice encreased of late years, that Dr. Paris considers "the expense of land-carriage for sand used as manure in *Cornwall alone* as now amounting at least to thirty thousand pounds annually."

* I think it necessary to remark that where Salt is used as a top-dressing for grass land, the quantity ought to be much less than is commonly used for ground that is afterwards to be ploughed for a crop of grain. Six bushels, or three hundred and thirty six pounds of Rock Salt, ground *very fine*, and regularly sown upon the grass, would be a proper quantity for an acre of pasture land ; whereas sixteen or twenty bushels may be used upon fallows for cleaning the ground preparatory to the putting in the grain. For meadow-land, two or three bushels of crushed Rock-Salt may be carefully sown upon each acre, immediately after the hay is got in, with great advantage, especially in hot and dry summers.

† The late Dr. Darwin, in treating on Salt as a manure, remarks, that as a stimulus which excites the vegetable absorbent vessels into greater action than usual, it may, in a certain quantity, encrease their growth, by enabling them to take up more nourishment in a given time, and perform their circulations and secretions with greater energy."

* I am desirous of recommending to my reader's perusal, a very valuable paper, which has lately been distributed gratis by the Board of Agriculture, written by the Right Honorable Sir John Sinclair, Bart. "on the means of preventing the rust in wheat by the use of salt," an object well entitled to be ascertained by decisive experiments.

then place my chief reliance on the effect which may be produced by your perusal of the several documents which are contained in the Appendix.

To ascertain the exact quantity of Salt which may be necessary for the different kinds of land, and to appreciate the benefits which result from its employment in all the various modes of culture that are adopted in this country, will require several long series of experiments, especially as some of the evidence given before the committee of the House of Commons was unsatisfactory and contradictory ; but the advantages which have arisen from giving Salt to sheep and cattle are so determinate and self-evident, that there appears to me to be nothing to prevent every farmer from immediately adopting the practice.

The most undeniable evidence has been afforded, that Common Salt uniformly promotes digestion in horses and cattle, and that this occasions them to make a rapid progress in fattening. It has also been found, that in feeding with chaff or cut straw, a larger quantity of this cheap and ordinary food can be given when sprinkled with Salt than can be administered in any other way ; and that as the filling the stomachs of cattle while fattening is a circumstance of the greatest importance, a very large portion of chaff, if seasoned with Salt, may be given with the utmost advantage to the growth and health of the animals.— Thus, every experimental grazier knows that an abundance of very ordinary food, if eaten with relish, will fatten cattle much sooner when given with a small allowance of substantial provender, than better food alone in a moderate quantity.— There is, indeed, hardly any food that can be offered to cattle, which, if mixed with Salt, will not be eaten with eagerness. Hence, nothing can be of more importance to a practical grazier than to know how to obtain this valuable saline mineral substance, at a cheap rate, and with little difficulty.

It was given in evidence last year, before the select committee of the House of Commons, that in feeding cattle, fourteen pounds of chaff, such as is produced in winnowing corn, and which of itself is of little or no value, will, when properly moistened and heated by steam, and mixed with two ounces of salt, save forty-two pounds of turnips. Surely this is a most important circumstance in the economy of a farm. Is it possible that this fact should pass unnoticed by any agriculturist ?

A friend of mine, in the year 1812, travelled through the United States of America, from the state of Massachusetts to the River Mississippi.— He observed that it was usual, throughout that extensive district, to put Salt within all the stacks of hay and likewise to sprinkle it among the hay, in the proportion of about fourteen pounds of Salt to one ton of hay. He says it was also a common practice in that country to give salt to sheep and cattle, and that he has frequently seen cattle follow a boy a mile or more, who held a portion of Salt in his hand, tempting the animals by showing it to them. The same individual assures me also that since his return to England he has adopted the same practice, mixing Salt with his own stacks of hay, and with the mashes to his horses, and constantly with the same benefit.

That horses, sheep, and cattle, would derive benefit from Salt, might, indeed, be imagined from observing the great desire they discover for it, and which manifests itself in every country where this mineral substance lies within their reach.— This is certainly the case, and in the Appendix many undeniable examples will be given to support the opinion. Several most curious facts, that were stated by a very respectable member of the House of commons, to prove the salubrious effects of Salt upon these animals, may also be seen in the Appendix.

It cannot then be doubted that Salt, when judiciously administered to live stock; assists their digestion, preserves them from disease, and improves their condition ; and from the evidence to be hereafter adduced, it will appear that the milk and butter produced from those cows which have Salt given to them is more abundant, and never acquires that turnip-flower which is generally so predominant in the milk and butter from those cows which are kept upon turnips *without* Salt. It has likewise been proved, that Common Salt is a certain cure for the bots in horses, and is a specific against the rot in sheep ; and that the wool is materially improved of such sheep as are fed with Salt.

It is impossible, I conceive, to read the great body of evidence which was delivered to the Honourble the Board of Trade, and to the committee of the House of Commons, without being convinced that the benefits resulting to the grazier and agriculturists, from the employment of Salt, must be great and important ; especially the evidence of John Christian Curwen, Esq. the representative in parliament for the city of Carlisle, who is himself a large farmer and grazier, and who stated to the committee, that upon a farm of one thousand pounds a year, he could not estimate the annual advantages, that might fairly be expected from the free use of Salt, at less than three hundred pounds.

If the benefits and profits arising from the unrestrained use of Salt in agriculture be so various and considerable, how comes it to pass, it may be asked, that its employment has not been universal throughout Great-Britain ? Various reasons may be assigned for this ; amongst others we may state the unwillingness which farmers in general evince, especially the lower class, to walk out of the old beaten path of their forefathers ; the want of directions how to make use of Salt for the purposes under consideration ; the enormous duty upon the article itself ; and, perhaps, above all others, next to the price, the many vexatious regulations to be observed before a remission of any part of the duty could be obtained.

Let us take one case as an instanee of these troublesome obstructions. By an act of parliament passed in the 57th year of George the 3d, it was enacted that the farmer might receive Salt for the purpose of mixing with the food of sheep or cattle, at the reduced duty of five shillings per bushel, or ten shillings per cwt. such Salt to be employed only and for no other purpose than feeding sheep or cattle ; but before any such Salt could be obtained, it was necessary to give a bond, with sufficient sureties, to the satisfaction of the Commissioners of his Majesty's Excise, in the penalty of six times the full duty upon such Salt : and no farther quantity of Salt could be obtained, however much the cattle, after being long accustomed to it, might require its use, until the bond given on the delivery of every prior quantity should be discharged.

It was also enacted that before such bonds could be discharged, a certificate must be given, declaring the whole of such Rock-Salt to have been used and consumed in mixing with the food of sheep or cattle, and for no other purpose whatever ; and that no such certificates should discharge any such bond, unless the collector of excise should, upon enquiry, be satisfied of the truth thereof, and should underwrite the same upon the said certificate. The act declared also, that if such certificate should not be signed and delivered to such collector before the expiration of thirteen months from the time of the bond being given, or should in any respects be false, or any of the salt should be consumed in any other manner than in feeding sheep or cattle, the penalty of the bond should be forfeited.

Under such penalties and restrictions, is it all surprising that Salt has not been more generally employed for the purposes above enumerated ; especially when it is recollected that even, under all these disadvantages, the farmer could not use a single bushel of Salt for curing his hay, for steeping his seed-wheat, or for manuring his land, until he had paid the enormous duty of thirty pounds per ton, which of itself amounted to a prohibition ?

I have, however, great pleasure in being able to congratulate you that an act passed both Houses of Parliament on the fifth of June last, to repeal the most vexatious of these restrictions, and to impose a low duty upon such Rock-Salt as should be hereafter delivered for *any* purpose of agriculture, as well as for feeding sheep or cattle.

Under this act of parliament, Salt may now be had at the reduced duty of two shillings and sixpence per bushel, or five shillings per cwt. for any of the following purposes, viz. for mixing with the food of sheep or cattle ; for steeping seed-corn ; for preserving hay, or for manuring land ; and no bond is required to be given, nor any sureties as heretofore, for the faithful employment of the Salt so obtained. And although the farmer must give a certificate that he has consumed the Salt in the way the act directs, it is not necessary that time should be lost, as heretofore, while the collector makes enquiries to satisfy himself of the truth of the allegations in the certificate, but he is bound to accept the same when presented, and the farmer is entitled to receive a farther supply of Salt immediately.

By this important act of parliament, the farmer is also allowed to remove any part of such Salt to another farm, or to sell it to a neighboring farmer for the purpose aforesaid ; and notwithstanding the penalty on a fraudulent misapplication of the Salt is fixed by this act at forty shillings the bushel, or at one hundred pounds, according to the determination of the person who shall sue for the same, still the act contains a provision, that the penalty may be mitigated by a justice of the peace to one-fourth part thereof.

Such are the alterations which have been made in the laws respecting the use of Rock-Salt in agriculture ; and it does appear to me that every farmer who has it in his power to purchase Salt should immediately procure a quantity, and make such experiments upon his land and with his live-stock as shall appear to him to be most likely to

increase the quantity and value of his produce. I am extremely anxious that a great number of agriculturists should immediately enter upon these experiments, because, in my estimation, this concession of the legislature is the greatest boon that the government has ever offered to the acceptance of the landed interest of this country ; and that if the occupiers of the land, after the late extraordinary exertions of the select committee of the House of Commons for their benefit, should discover an indifference or disinclination to accept of the proffered gift, those interested persons who are enemies to the total repeal of the laws relating to Salt will avail themselves of this circumstance as an argument against the advocates for the repeal ; and the whole of the late Salt laws will soon be re-enacted in all their original force and severity. Whereas, if experiments were very generally instituted throughout the country, I doubt not but the farmers would soon become so fully convinced of the value of salt for the various purposes of husbandry, that a general application would ere long be made to parliament for a total repeal of all the laws relating to Salt ; and such a petition as this would be irresistable. The agriculturist and manufacturer would then be empowered to dig Rock-Salt with as much freedom as they can now dig sand, or raise coal ; and the various national benefits which would result therefrom would be more numerous and important than could easily be enumerated.

Having addressed you at much greater length than I at first intended, all that remains for me now is, that I should give a few necessary cautions and directions to such of my readers as may adopt the practice which is recommended in the foregoing pages.

In the first place, I am desirous of remarking that no land can be said to be fruitful which is entirely exhausted of carbonaceous matter; therefore, if it were possible for an estate to be so worn out by successive crops that little or no carbon remained in the soil, it is not likely that Salt alone would restore it to its original fertility. I consider also that the land which contains most carbon will derive most benefit from the application of Salt. But the safest way for a farmer to proceed is to use his salt sparingly at first, and in all cases to leave a small portion of the same land without Salt ; so that the real effects produced by the Salt may be, by comparison, in every instance, self-evident and palpable

A farmer who does not wish his land to lie fallow, ought, undoubtedly, to use too little rather than too much salt ; because a very abundant dressing of this saline mineral substance might render the land, for one year at least, absolutely barren. We read in scripture of the " Valley of Salt," where David smote the Syrians, which in all probability was an extent of low land that had been rendered barren by an influx of salt water. In one of the very early numbers of the Philosophical Transactions, is an account of a valley of the same kind near Aleppo ; and the late Dr. Browning relates, that there is a vast desart on the frontiers of Russia, towards Crim Tartary, which, in consequence of a superabundance of Salt, has become so absolutely sterile, that for the space of many miles neither tree nor herb grows upon it.

This reminds me of a circumstance of primary importance to all those who obtain Salt under the late act of parliament. This act enjoins that the salt shall be delivered in lumps of twenty pounds each, or upwards ; consequently, the whole of such salt must be broken before it can be used with any advantage, for wherever Salt is accumulated upon land, it must inevitably destroy all vegetation that lies beneath it. Now it has occurred to me, that there is a possibility, from the carelessness of a labourer, of its being sometimes spread upon the land without being properly broken ; and I am decidedly of opinion, that wherever a *lump* of Rock-Salt falls, whether upon arable or pasture land, it must do mischief. My advice therefore is, that the proprietor of a farm, when he receives a parcel of Rock-Salt from Norwich should make a point of having the whole of it ground or reduced to a powder nearly as fine as common table salt, and passed through a sieve of the requisite fineness, before he allows any of it to be laid upon the ground. Rock-Salt is not a hard substance : it may easily be crushed and divided as much as is necessary for any of these purposes.

As to the quantity of salt which it will be adviseable to use for the respective crops, and upon the different kinds of land, this will be best learnt by a perusal of the several testimonials and other documents which will be found in the Appendix. But the best way of all others for ascertaining this point would be for every agriculturalist to depend upon the results of his own experiments. To this end, I would advise him to institute a set of experiments upon every distinct species of grain which he is in the practice of cultivating, as well as upon his pasture land, and to keep a register of every minute circumstance attending each of these trials.

A large kitchen-garden, wherever there is one attached to a farm-house, would in some cases be the most appropriate spot for such experiments ; as this would be more under the immediate eye of the proprietor, and the experiments being upon a small scale, would be attended with little or no expense. The circumstance of an agriculturalist being now empowered to divide the salt which he shall obtain by permit, among as many of the neighbouring farmers as he may think fit, is extremely favourable to such circumscribed experiments, and will be very gratifying to those who may wish to satisfy themselves of the value of Common Salt, and yet would not like to incur the risk of buying a large parcel solely for their own use. And as the late act allows the use of Salt in agriculture, as well as for feeding all kinds of cattle, this affords a large scope for its consumption.

From the trials which have already been made in feeding the live stock upon a farm, it appears that the following quantities may at all times be administered with perfect safety :

To neat cattle four ounces of salt per day, mixed up with steamed chaff or other moistened food ; one half to be given in the morning and the other in the latter part of the day.

To horses four ounces per day, as aforesaid.

To young heifers two ounces per day, at twice as aforesaid.

To calves one ounce per day, divided into two portions.

To sheep two ounces per head per week.—The Salt to be spread very thin upon slates or tiles, in the field where the sheep are fed.

Few farmers or graziers, I flatter myself, will read the foregoing pages, and the Appendix, without feeling some desire to improve their own estates, and increase the value of their live stock by the use of Salt ; but if there are any who are incapable of feeling a desire for improvement, I trust there are, on the other hand, many country gentlemen and enlightened agriculturists, who rejoice in every opportunity of contributing toward the national improvement of Great Britain, and who will entertain the subject from principles of pure patriotism.

It was the opinion of Aristotle, that " the cultivation of the land is favorable to liberty." And a writer of more modern times remarks that " well ordered monarchies are more frequently found in highly cultivated and fruitful countries." There was an adage formerly in vogue, that " fields covered with ears of corn are the sources of victories." " The Sardinians," says the President Montesquieu, " were formerly very rich ; and Aristeus, so famed for his love of Agriculture, was their lawgiver. But the Carthagenians becoming their masters, destroyed every thing proper for the nourishment of man, and forbade the cultivation of the lands upon pain of death." The state consequently fell into decay, and for ages became the prey of a variety of conquerors. What is most remarkable, however, is, that even to this day the greatest part of the Island of Sardinia remains an uncultivated, barren waste. To this deplorable state of things the empire of China affords a striking contrast.

" The ancient Emperors of China," says Montesquieu, " were not conquerors. The first thing they did to aggrandize themselves, gave the highest proof of their wisdom. They raised from beneath the waters, (or rather, they recovered from the sea,) two of the finest provinces of the empire. These owe their existence to the labor of man ; and it is the inexpressible fertility of these two provinces which has given Europe such ideas of the felicity of this vast country."—And from the united testimony of travellers, we have reason to believe that every part of this extensive empire is constantly preserved in the highest possible state of cultivation ; whereas in England and Wales alone, there are upwards of seven millions of acres of waste land, which have been for ages and still continue to be of little or no benefit to the community.

The greatest obstacle to the cultivation of these lands is the want of manure, there being at present a great insufficiency for the lands which are enclosed. Let the use of Rock-Salt, however, become general in agriculture, and this deficiency will in a great measure be supplied. Every opulent farmer will then have the means within his reach of putting the whole of his farm into the most desirable state of improvement ; so much so that it would soon be considered disgraceful for any agriculturist to allow a single rood of land belonging to his estate to remain uncultivated.—This would prepare the way for the enclosure of those vast tracts of common land which we perceive in every quarter of the United Kingdom ; and the alteration which this would make in the face of the country, to say nothing of the

increase of its inhabitants, may be more easily conceived than described.

Had our ancestors been totally inattentive to the improvement of agriculture, the greatest part of Great-Britain would still have been covered with wood; and in like manner, had it not been for the progress of civilization, and the desire of improvement, the finest provinces of France and Germany would still have been overshadowed by the Hercynian forest, which in the days of Julius Cæsar, extended from the borders of Alsatia and Switzerland, over the greatest part of Germany, Hungary, and Transylvania, and was said to be sixty days' journey in length and nine in breadth.

"Agriculture" said the late amiable Mr. Hol linshead "is the most certain source of domestic riches. Where it is neglected, whatever wealth may be imported from abroad, poverty and misery will abound at home. Such is and ever will be the fluctuating state of trade and manufactures that thousands of people may be in full employment to-day, and in beggary to-morrow. This can never happen to those who cultivate the ground. They can eat the fruits of their labour, and can always by industry obtain, at least the necessaries of life."

However true these observations may be, thank God, the times in which we live are propitious to every kind of improvement; to the progress of science, as well as to the advancement of the arts; and the spirit of enquiry which is abroad throughout the kingdom, will, I trust, induce many hundred intelligent agriculturists to attend seriously to the important subjects upon which I have addressed you.

Allow me to add, that I am confident those of you who feel any solicitude upon the subject, cannot more effectually consult your own best interests, or those of the community at large, than by entering immediately upon such experimental researches as are best suited to your respective situations and convenience, as your success, whatever it may be, will be equally conducive to individual and national prosperity.

I am, Gentlemen,
Your most obedient servant.
SAMUEL PARKES.

Agricultural Chemistry, No. IV.

BY HUMPHREY DAVY.

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Vegetable substances in general are of a very compound nature, and consist of a great number of elements, most of which belong likewise to the other kingdoms of nature, and are found in various forms. Their more complicated arrangements are best understood after their simpler forms of combination have been examined.

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I shall mention, in few words, the characteristic properties of the most important simple substances, and the numbers representing the proportions in which they combine in these cases, where they have been accurately ascertained.

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2. *Chlorine*, or oxymuriatic gas, is like oxygene, a permanent elastic fluid. Its colour is yellowish green, it supports the combustion of all the common inflammable bodies except charcoal; its specific gravity is to that of air as 24677 to 10000: it is soluble in about half its volume of water, and its solution in water destroys vegetable colours. Many of the metals (such as arsenic or copper) take fire spontaneously when introduced into a jar or bottle filled with the gas. Chlorine may be procured by heating together a mixture of spirits of salt or muriatic acid, and manganese. The number representing the proportion in which this gas enters into combination is 67.

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5. *Carbon* is considered as the pure matter of charcoal, and it may be produced by passing spirits of wine through a tube heated red. It has not yet been fused; but rises in vapour at an intense heat. Its specific gravity cannot be easily ascertained; but that of the diamond, which cannot chemically be distinguished from pure carbon, is to that of water as 3500 to 1000. Char coal has the remarkable property of absorbing several times its volume of different elastic fluids which are capable of being expelled from it by heat. The number representing it is 11.4.

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ALBANY:
SATURDAY, AUGUST 28, 1819.

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PARKES's LETTER.

Agreeably to promise, we have given, at full length, the letter of Mr. Parkes, to the Farmers and Graziers of Great Britain, on the use of Salt, &c. We recommend it to the serious attention of our readers. We have omitted most of the notes, which merely referred to the Appendix; because we mean to give, from time to time, only such parts of the Appendix as are most interesting and important. Those who may wish for the whole, will have an opportunity of purchasing it, as it has been published lately by Messrs. Carey & Son, of Philadelphia, and will be for sale in our bookstores. It is hoped, that our Agricultural Societies may promote the sale of the work, to remunerate the enterprising publishers.

Mr. Homespun,

Much is said in the Agricultural world about the efficacy of Salt as a manure. It appears to me that if Salt is put on soil of any kind in considerable quantities it must destroy vegetation.—The scriptures mention the application of Salt; and from that it would appear that beating down the city was not of sufficient efficacy to destroy, but to make destruction complete, Salt was sown upon the city. We find in Judges, ix. 45, as follows: "And Abimelick fought against the city all that day, and he took the city and slew the people that were therein, and beat down the city, and sowed it with salt." From the above, salt must be considered as an application to prevent future vegetation. ARATOR.

New-Lebanon Springs, Aug. 27th, 1819.

REMARKS.

We have no pretence to be deeply versed in scripture history, but we presume the salt sown upon the city, alluded to in Judges, ix. 15. was not for the purpose of destroying vegetation. If we should venture a conjecture, it would be that it was done for the purpose of checking the progress, and preventing the effects of corruption in the innnmerable dead bodies, of those who were slain, and which could not have received the rites of burial. It was, perhaps, intended by Abimeleck, to preserve the health of his own camp; or it may have been a custom of those times, connected with such events as that recorded in the text, and growing out of a religious instead of a revengeful principle, like that to which Arator seems to ascribe it. We give these as conjectures of the moment, having consulted no com-

increase the quantity and value of his produce. I am extremely anxious that a great number of agriculturists should immediately enter upon these experiments, because, in my estimation, this concession of the legislature is the greatest boon that the government has ever offered to the acceptance of the landed interest of this country ; and that if the occupiers of the land, after the late extraordinary exertions of the select committee of the House of Commons for their benefit, should discover an indifference or disinclination to accept of the proffered gift, those interested persons who are enemies to the total repeal of the laws relating to Salt will avail themselves of this circumstance as an argument against the advocates for the repeal ; and the whole of the late Salt laws will soon be re-enacted in all their original force and severity. Whereas, if experiments were very generally instituted throughout the country, I doubt not but the farmers would soon become so fully convinced of the value of salt for the various purposes of husbandry, that a general application would ere long be made to parliament for a total repeal of all the laws relating to Salt ; and such a petition as this would be irresistable. The agriculturist and manufacturer would then be empowered to dig Rock-Salt with as much freedom as they can now dig sand, or raise coal ; and the various national benefits which would result therefrom would be more numerous and important than could easily be enumerated.

Having addressed you at much greater length than I at first intended, all that remains for me now is, that I should give a few necessary cautions and directions to such of my readers as may adopt the practice which is recommended in the foregoing pages.

In the first place, I am desirous of remarking that no land can be said to be fruitful which is entirely exhausted of carbonaceous matter; therefore, if it were possible for an estate to be so worn out by successive crops that little or no carbon remained in the soil, it is not likely that Salt alone would restore it to its original fertility. I consider also that the land which contains most carbon will derive most benefit from the application of Salt. But the safest way for a farmer to proceed is to use his salt sparingly at first, and in all cases to leave a small portion of the same land without Salt ; so that the real effects produced by the Salt may be, by comparison, in every instance, self-evident and palpable

A farmer who does not wish his land to lie fallow, ought, undoubtedly, to use too little rather than too much salt ; because a very abundant dressing of this saline mineral substance might render the land, for one year at least, absolutely barren. We read in scripture of the " Valley of Salt," where David smote the Syrians, which in all probability was an extent of low land that had been rendered barren by an influx of salt water. In one of the very early numbers of the Philosophical Transactions, is an account of a valley of the same kind near Aleppo ; and the late Dr. Browning relates, that there is a vast desart on the frontiers of Russia, towards Crim Tartary, which, in consequence of a superabundance of Salt, has become so absolutely sterile, that for the space of many miles neither tree nor herb grows upon it.

This reminds me of a circumstance of primary importance to all those who obtain Salt under the late act of parliament. This act enjoins that the salt shall be delivered in lumps of twenty pounds each, or upwards ; consequently, the whole of such salt must be broken before it can be used with any advantage, for wherever Salt is accumulated upon land, it must inevitably destroy all vegetation that lies beneath it. Now it has occurred to me, that there is a possibility, from the carelessness of a labourer, of its being sometimes spread upon the land without being properly broken ; and I am decidedly of opinion, that wherever a *lump* of Rock-Salt falls, whether upon arable or pasture land, it must do mischief. My advice therefore is, that the proprietor of a farm, when he receives a parcel of Rock-Salt from Norwich should make a point of having the whole of it ground or reduced to a powder nearly as fine as common table salt, and passed through a sieve of the requisite fineness, before he allows any of it to be laid upon the ground. Rock-Salt is not a hard substance : it may easily be crushed and divided as much as is necessary for any of these purposes.

As to the quantity of salt which it will be adviseable to use for the respective crops, and upon the different kinds of land, this will be best learnt by a perusal of the several testimonials and other documents which will be found in the Appendix. But the best way of all others for ascertaining this point would be for every agriculturalist to depend upon the results of his own experiments. To this end, I would advise him to institute a set of experiments upon every distinct species of grain which he is in the practice of cultivating, as well as upon his pasture land, and to keep a register of every minute circumstance attending each of these trials.

A large kitchen-garden, wherever there is one attached to a farm-house, would in some cases be the most appropriate spot for such experiments ; as this would be more under the immediate eye of the proprietor, and the experiments being upon a small scale, would be attended with little or no expense. The circumstance of an agriculturalist being now empowered to divide the salt which he shall obtain by permit, among as many of the neighbouring farmers as he may think fit, is extremely favourable to such circumscribed experiments, and will be very gratifying to those who may wish to satisfy themselves of the value of Common Salt, and yet would not like to incur the risk of buying a large parcel solely for their own use. And as the late act allows the use of Salt in agriculture, as well as for feeding all kinds of cattle, this affords a large scope for its consumption.

From the trials which have already been made in feeding the live stock upon a farm, it appears that the following quantities may at all times be administered with perfect safety :

To neat cattle four ounces of salt per day, mixed up with steamed chaff or other moistened food ; one half to be given in the morning and the other in the latter part of the day.

To horses four ounces per day, as aforesaid.

To young heifers two ounces per day, at twice as aforesaid.

To calves one ounce per day, divided into two portions.

To sheep two ounces per head per week.—The Salt to be spread very thin upon slates or tiles, in the field where the sheep are fed.

Few farmers or graziers, I flatter myself, will read the foregoing pages, and the Appendix, without feeling some desire to improve their own estates, and increase the value of their live stock by the use of Salt ; but if there are any who are incapable of feeling a desire for improvement, I trust there are, on the other hand, many country gentlemen and enlightened agriculturists, who rejoice in every opportunity of contributing toward the national improvement of Great Britain, and who will entertain the subject from principles of pure patriotism.

It was the opinion of Aristotle, that " the cultivation of the land is favorable to liberty." And a writer of more modern times remarks that " well ordered monarchies are more frequently found in highly cultivated and fruitful countries." There was an adage formerly in vogue, that " fields covered with ears of corn are the sources of victories." " The Sardinians," says the President Montesquieu, " were formerly very rich ; and Aristeus, so famed for his love of Agriculture, was their lawgiver. But the Carthagenians becoming their masters, destroyed every thing proper for the nourishment of man, and forbade the cultivation of the lands upon pain of death." The state consequently fell into decay, and for ages became the prey of a variety of conquerors. What is most remarkable, however, is, that even to this day the greatest part of the Island of Sardinia remains an uncultivated, barren waste. To this deplorable state of things the empire of China affords a striking contrast.

" The ancient Emperors of China," says Montesquieu, " were not conquerors. The first thing they did to aggrandize themselves, gave the highest proof of their wisdom. They raised from beneath the waters, (or rather, they recovered from the sea,) two of the finest provinces of the empire. These owe their existence to the labor of man ; and it is the inexpressible fertility of these two provinces which has given Europe such ideas of the felicity of this vast country."—And from the united testimony of travellers, we have reason to believe that every part of this extensive empire is constantly preserved in the highest possible state of cultivation ; whereas in England and Wales alone, there are upwards of seven millions of acres of waste land, which have been for ages and still continue to be of little or no benefit to the community.

The greatest obstacle to the cultivation of these lands is the want of manure, there being at present a great insufficiency for the lands which are enclosed. Let the use of Rock-Salt, however, become general in agriculture, and this deficiency will in a great measure be supplied. Every opulent farmer will then have the means within his reach of putting the whole of his farm into the most desirable state of improvement ; so much so that it would soon be considered disgraceful for any agriculturist to allow a single rood of land belonging to his estate to remain uncultivated.—This would prepare the way for the enclosure of those vast tracts of common land which we perceive in every quarter of the United Kingdom ; and the alteration which this would make in the face of the country, to say nothing of the

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Mr. HOMESPUN,

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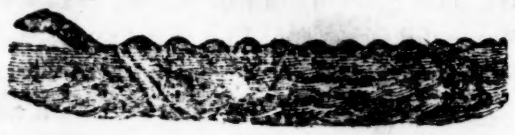
mentator; but ARATOR must be satisfied, after reading Mr. Parkes's letter, that although *too much* salt may be prejudicial to vegetation; yet that certain quantities, according to the nature of the soil to which the mineral may have been applied, have been found very beneficial. The naked fact in Judges, ix. 45. is immaterial in this case, at least till we know the reason why Abimeleck sowed the desolate city with salt.—EDITOR.

Good.—Gen. M'Clure has established a woolen factory at Bath, Steuben Co. and invites the farmers to bring in their wool; engaging that he will afford them cloth fine enough for *dandies*. He has got *Brewster's* late invented spinning machine into use, by water power, with which a girl of ten years old can attend 250 spindles, and spin 100 pounds of wool in a day. With this machine wool may be spun extremely fine and even; and one hand can perform as much as can be performed by nine or ten with hand jennies. So much for an American invention.

This excellent machine ought to be generally put into operation. It will prove immensely beneficial to this country.

We see it stated, on respectable authority, that in the countries bordering on the Black sea, the usual price of a laborer in husbandry, is about $25 a year, the laborer finding himself. The more southerly tracts of those countries are favorable to the growth of cotton; the more northerly for wheat. Can we successfully compete with those countries, in our products, while labor is so cheap there, and so dear here? On the same authority we find it stated that in Indostan the same sort of laborer, finding himself, acquires only from twelve to eighteen dollars a year.—Money is constantly sinking to a level. Times of war, however, often impede this natural course of things; but this general time of peace, must drain off much of our specie; and it must flow into those countries where it least abounds. If a general peace continue long, we shall probably be reduced to the old prices for every thing as they were 25 years ago.

The Sea Serpent.—In a letter from the marshal of the district of Massachusetts, a particular description is given of this animal. He represents it to be about 60 feet long. It frequently passed quit near him, and he saw it at various times for four hours. Its head appeared about three feet out of water; and he counted thirteen of what seemed to him to be protuberances on its back, which probaly were merely its undulations in forcing itself through the water, which it does with rapidity. At times it would sink under water, for some minutes, then rise again. By his description, accompanied with a drawing, it appears to be an enormous water-snake. He tho't it seemed to be rather harmless. The animal, agreeably to the marshal's view of him, is described by the following delineation:



We have received from a correspondent in Russia, Herkimer county, an interesting article, recording the melancholly fate of a worthy young man. See OBITUARY.

TALAVERA WHEAT.

For the information of our Agricultural friends, we mention, that William E. Norman, of Hudson, has recently imported a few bushels of Talavera Wheat, of a very fine quality, and remarkably clean. Those who wish to procure this wheat for fall sowing, may have it forwarded to Albany. The price is six dollars per bushel. The same gentleman has on hand a quantity of Lucerne grass seed, at 56 cents per pound.

Extract of a letter to the Editor of The Plough Boy, dated Truxton, (Cortland co.) 8th month, 16th, 1819.

A few days since a lad of twelve years of age, was pursued by a wolf in a piece of wood. The boy sprang up a small tree, which would have bent to the ground, had it not lodged on another. He remained standing on a small limb, not more than an inch thick, all night, the wolf watching him. He was relieved by some of his comrades in the morning, his feet having swelled considerably. The wolf escaped. This happened in the town of German, Chenango county.

Weekly Summary.

The military cadets, stationed at Westpoint, were lately marched to the north, and on the route, while at Poughkeepsie, exhibited a variety of military evolutions much to their credit as proficients in the military art. In the evening they were invited to a splendid and numerously attended ball, which was had on the occasion.

Singular presence of mind.—**A child not four** years old, of a Mrs. Sargeant, in Chateaugay, Essex county, being left alone, its clothes, being of cotton, caught fire, and were mostly burned up; but it contrived to get a towel, and by dipping it in water, and slapping it about its body, extinguished the flames; then greased the burnt parts, went to bed, and is in a fair way of recovery.

A Tennessee paper states the late purchase of land, in that state, from the Cherokees, to amount to about 1,000,000 acres of second rate land.

A few cases of yellow fever have lately occurred in Charleston, S. C. but nothing serious is apprehended there. The accounts of the prevalence of the fever at Baltimore appear to have been exaggerated.

Late accounts from Greenbay and Mackinaw, represent the Indians in that quarter to be friendly, and our troops there in good health and spirits. Gen. Brown has lately been at the former place and has ordered another fort to be built on the Fox river, the scite of the one already built there not being deemed advantageous.

When the deputation of Osages arrived at Washington, one of them was afterwards at Baltimore, and was shown every thing curious there, and amongst other things the jail, in which some debtors were confined. The Indian asked "what you keep em dare for?" Because they owe skins (money) that they dont pay, was the answer. The Indian very truly and sagaciously replied, "*ah! he no catch any skin there.*"

Chesnut.—**By accurate experiments it is found** that the *wood* of this tree contains double the quantity of *tannin* that can be extracted from rasped oak bark, and six-sevenths as much colouring matter as logwood. With the addition of iron, this colouring matter gives a fine black, and makes an excellent ink. Such are the results of the experiments of Mr. Sheldon, of Springfield, Mass. And he also says, that leather tanned with this wood "has in every instance been superior to that tanned, in a comparative experiment, with oak bark." "As a material for making ink," he adds, "the wood of the Chesnut is probably unrivalled. Combined with iron, in any proportion, it gives, as it is diluted or concreted, a pure blue black," which, "when used on paper, gives an intense shining black." This may be considered a valuable discovery.

The steam-boats destined on the Yellow Stone River Expedition cannot make any considerable headway against the current of the Missouri, owing, as is said, to their not being so well constructed for the purpose as was expected, or possibly to the inability of any steam-boat stemming the current of that river when it is high, as it always is during the month of July. A steam-boat has made its progress from St. Louis to Franklin, in the Missouri, (200 miles) in seven days.

A noble sailor.—**Joseph Stephens** was at the helm of the Huntress packet, in Long-Island Sound, when a child of a Mr. Hoyle, lately from England, fell overboard, the vessel being under a stiff breeze. Joe jumped overboard and seized the child: but before the vessel could round to she was nearly half a mile ahead. The captain manned the boat, and could only reach Joe just as he was sinking; by reaching as deep as he could he grasped Joe, and saved him and the child. They were both apparently dead, but were restored by proper measures used for the purpose. Sailors have their vices, but they have virtues of a manly cast.

The Governor has issued a proclamation agreeably to law, for dispossessing squatters who have settled on Grand-Island, in Niagara river.

General Long, with 600 Americans and Spaniards, and 3000 Indians, has raised the standard of Independence in Texas. He was soon to make his head-quarters at Nacogdoches.

It is said there are 300 gambling-houses licensed in New-Orleans, and that the licenses produce a revenue to that city of 50,000 dollars! The old inhabitants of the place have still the ascendancy in its councils. This cannot be long the case.

Piracy.—**The sloop Lawrence, capt. Atwick,** lately arrived in Charleston, where the vessel was owned, when seven of the crew were immediately seized and put in jail—the rest were not to be found. It appears that the Lawrence had been out for piratical purposes, and during her cruise had taken the British brig Ann, robbed the vessel of most of its valuable contents, and, probably to prevent detection, intended to murder the whole crew. It seems, however, that two of them escaped, and have communicated the information that led to the seizure of the seven above mentioned.

Pirates.—**The crew of the Irresistible** were lately tried at Richmond for piracy, when 14 were found guilty, under a special verdict, recommended by the court, in order that the point should be determined by the Judges of the Supreme Court of the United States whether these men were pirates by a fair construction of the laws under which they were condemned. The next tried was found not guilty. On the trial of the next a *nolle prosequi* was entered. The next was found guilty on a special verdict, differing somewhat from that found in the first fourteen. The next found not guilty. The attorney for the prosecution then postponed the trial of the remainder of the crew, principally for the purpose or a more clear exposition of the laws on the subject, which for the reputation of the country is devoutly to be desired, in order that if our laws against piracy are found defective they may be so amended as to be rendered efficient.

The Altamaha river, in Georgia, will probably soon become the most important in that state. The obstructions to its navigation, (drifted wood) are removing, and steamboats will then be enabled to ascend the stream as far as the junction of the Ocome and Oakmulgee. The rapidly rising town of Darien, situated near the mouth of the Altamaha, will probably soon become the largest seaport in that state.

An English gentleman, lately, in Philadelphia, being troubled with the prickly heat, undertook to cure himself of this unpleasant complaint by sponging his body with a mixture of cold water and vinegar, which put an end to his existence in five hours.

In New-Jersey, Nathaniel Lemmons has been committed for the murder of his father. They were both intoxicated when the deed was done.

The increase of population in Alabama was about 35,000 last year—this year it is expected to amount to 40,000.

It is stated, on good authority, that the Floridas will be found capable of affording all the sugar and coffee that will be requisite for the consumption of the United States.

Take warning.—**In the Philadelphia Union,** it is stated as a fact, that at a certain season of the year, if either dogs or cats be *highly irritated* their saliva then becomes poisonous, and that if it be then applied to wounded flesh it will produce hydrophobia. The writer in that paper cites cases published by the celebrated Italian Physician Rossi, where the animals themselves had no appearance of hydrophobia, yet by their bite communicated it to various subjects; and he adds that recent occurrences have, in his mind, established the facts beyond doubt. The writer does not mention the particular time of the year, but if he is correct, we should suppose that about the present is the most probable time. This matter might be ascertained without much difficulty.

AGRICULTURAL.

Dairy secret.—**Have two pans in boiling wa**ter—pour the fresh milk into one, and cover it with the other, by which the quantity of cream will be much increased, and its quality improved.

A machine has been invented in Germany for ploughing and harrowing by the aid of wind. The machine performs these operations by the aid of sails, similar to those of a wind mill.

In a London paper it is stated that on land manured with Salt, snails die as fast as they enter on the ground.

FOREIGN.

The London papers speak of numerous assemblages of the poorer classes in Great-Britain, occasioned by the pressure of the times, and in some instances a spirit of insubordination is manifested "which were it not for the strong arm of government would break out in open violence." In one instance an English baronet was placed in the chair, supported by a clergyman, where a number of violent resolutions were passed, while a flag was flying, with "*Annual Parliaments*," "*Universal Suffrage*," "*Ballot by Vote*," and "*No Corn Laws*," inscribed on it. This meeting was at Stockport, and was uncommonly numerous. It is also stated that Sir F. Burdett is about to introduce once more his motion in Parliament for a reform of that body.

The British have shut up the public navy-yard at Halifax, and discharged the officers and workmen. Another account says they are to rendezvous at Bermuda.

The English officers in France have received orders to return home—various conjectures about this—the one seemingly the most probable is, that there is likely to be some difference between England, Prussia and Austria, on the one side, and Russia on the other. The growing and formidable power of Russia is calculated to excite jealousy in Europe.

Several parts of France have been devastated by tremendous storms. In one place 85 houses destroyed by lightning. On the 21st ult, a tempest, accompanied with hail, thunder, &c. ravaged upwards of 50 communes. Locusts, also, were likely to destroy the harvest of the whole department of Arles.

The Consecration of the king of France was to take place on the 25th inst.

The accounts of the difference between the king of Sweden, Bernadotte, and the emperor of Russia, is contradicted. The late account was, that Alexander had requested Bernadotte to descend from his throne.

English paupers have been shipped to this country at the expense of the overseers of the poor.

In the Parliament of Great-Britain a bill was introduced for preventing enlistments in foreign service, but its further consideration has been postponed till May next. The evident object of the bill is to prevent British subjects from engaging in the cause of the Patriots of South America.

Walter Scott is said to have realised 72,000*l* within the last 12 years, by his literary works, which in less than a century may be all consigned to oblivion.

A cow, with a wooden leg, was lately killed in England, after being fatted for beef—she had upwards of a hundred weight of tallow—whole weight 1,331 pounds. About 17 months previous she broke her leg, which was amputated, and its place supplied with one of wood. She fell away greatly at first, but afterwards fatted so rapidly as to become the wonder of all that saw her.

The archbishop of Jerusalem has lately been in England for the purpose of soliciting aid in establishing a printing press at Mount Libanus, between Palestine and Syria, for the purpose of printing the scriptures in different oriental languages, in which he is reported to be very learned, and has been very successful in his mission.

Accounts from Italy state, that the emperor of Austria was at Rome, to obtain the consent of the Pope to the divorce of Maria Louisa from Napoleon, in order that she may marry the king of Prussia.

The Persian ambassador, when in Vienna, on his way to England, presented the emperor of Austria with several new poems, one of which contained 14,000 stanzas!

NEW-YORK, August 3.

BALLOON.

Yesterday afternoon, Mr. Guille, according to his advertisements, ascended in his Balloon from Vauxhall Gardens. The streets and avenues were thronged with people, and the very house tops were crowded. There appeared to be not more than 7 or 8 hundred persons in the Garden. The inflating of the balloon, which is a curious process, and effected by hogsheads containing the gas and conductors leading to the interior, commenced about 2 o'clock, and about half past six the car was attached to it. Mr. Guille entered with two American flags, and the balloon ascended in a noble manner. The weather was cloudy, and the wind from about W. N. W. which blew heavily; the balloon still sailed with great majesty when the Aeronaut threw out the flags—having attained the intended height, he cut the cord, and the Parachute immediately inflated and left the Balloon, which continued to ascend.—The Parachute descended slowly, and the wind wafted it towards Long Island.

He landed about seven o'clock at *Bushwick*, Long Island, and brought a certificate of his landing from a gentleman on the spot. He reports that he had a pleasant and easy jaunt. He was at the Circus at 9 o'clock, and was received with great applause.—*Advocate*.

AGRICULTURAL NOTICE.

Presidents of Agricultural Societies are respectfully requested to notify the editor of the Plough Boy, by a line to the Post-Master, Albany, the time and place of their approaching exhibitions—if one or two days—the amount of their premiums, and whether payable in cash or plate.

OBITUARY.

Drowned, on Friday the 13th inst. in Black creek, at its junction with the west Canada creek, in the town of Russia, Dr. JAMES P. SEARS, aged 21 years. He had repaired to this place in company with three others on a fishing party, which was attended with no unpleasant event until about 6 o'clock, P. M. when in the act of swimming across the creek with a seine in tow, young Sears, to the utmost consternation and heart-rending grief of his companions, sunk to rise no more. Every exertion was made by his distressed comrades, to rescue him from that awful fate to which it seems in the order of Providence he was destined, but to no effect. The alarm was immediately given; the surrounding neighbours assembled at the fatal spot, and after five hours unremitted exertion, found his body a short distance from where he disappeared, in 18 feet water. His funeral obsequies were attended on the Sunday following by the largest concourse of people ever assembled in this town. An excellent and appropriate discourse was delivered on the occasion by the Rev. Samuel Sweezey, from Proverbs, 27th Chap. 1st verse, "boast not thyself of to-morrow, for thou knowest not what a day may bring forth." The premature death of this young man, has excited the universal regret and sympathy of all who knew him. His modest, amiable and dignified deportment, had secured to him the respect and esteem of an extensive community. His uniform and generous disposition, his noble and feeling heart, had won the affections of all his acquaintances, and his susceptive and comprehensive mind, was rapidly expanding in the science of his profession, in which he promised to become a useful and ornamental member. Such was the character of this virtuous and beloved youth. But God, the all-wise disposer of events, has called him home. A friend, who knew his worth, and sensibly feels his loss, could not withhold this small tribute to his memory.

Died at Blenheim, Schoharie county, on Saturday the 21st inst of a lingering disease, Capt. JACOB HAGER, in the 85th year of his age. It may be truly said, that he was a true friend to his country, a patriot and a soldier. He served in the French war, and as a captain through the revolution of 1776, on the frontiers, where he distinguished himself, and risked his life in many instances, to gain our independence. He was a faithful friend, an affectionate husband, and a kind father. He descended to the grave, like a ripe shock of corn, and died in the full faith of his Redeemer. X.

A FEW copies of Watson's History of the Berkshire Agricultural Society, may be had at the Post-Office.

JOHN ERSKINE LOVETT, Attorney at Law, has removed to No. 93, Pearl-street, two doors north of Messrs. Websters & Skinners' Book-store.
Albany, June 17, 1819.

JONAS HARRISON,
ATTORNEY at Law, one door north of the Court-House, Buffalo, N. Y.

PROPOSALS,

For carrying the Mail on the following routes will be received at the General Post Office, until Saturday, the 2d of October next.

1. From Peekskill by Crum Pond to Somerstown, once a week, 14 miles.

Leave Peekskill every Tuesday at 6 *a m* and arrive at Somerstown by 9 *a m*.

Leave Somerstown at 10 *a m* and arrive at Peekskill by 5 *p m*.

2. From Pine Plains to North Amenia, 8 miles.

Leave Pine Plains every Tuesday at 6 *a m* and arrive at North Amenia by 3 *a m*.

Leave North Amenia at 10 *a m* and arrive at Pine Plains by noon.

3. From Great Bend, Pa. by Harmony and Windsor to Deposit, once a week, 28 miles.

Leave Deposit every Saturday at 6 *a m* and arrive at Great Bend by 2 *p m*.

Leave Great Bend every Friday at 10 *a m* and arrive at Deposit by 6 *p m*.

4. From Albany by Spencertown to Sheffield, Ms. 43 miles.

Leave Albany every Wednesday at 6 *a m* and arrive at Sheffield by 6 *p m*.

Leave Sheffield every Thursday at 6 *a m* and arrive at Albany by 6 *p m*.

5. From Troy by Brunswick, Grafton and Petersburgh to Williamstown, Ms. once a week, 23 1-2.

Leave Troy every Monday at 10 *a m* and arrive at Williamstown by 6 *p m*.

Leave Williamstown every Tuesday at 6 *a m* and arrive at Troy by 2 *p m*.

6. From Schenectady to Utica on the south side of Mohawk River, once a week, 76 miles.

Leave Schenectady every Tuesday at 6 *a m* and arrive at Utica on Wednesday by 6 *p m*.

Leave Utica every Thursday at 6 *a m* and arrive at Schenectady on Friday by 6 *p m*.

7. From Cherry Valley by Long Patent, Westford and Decatur to Worcester, once a week, 21 miles.

Leave Cherry Valley every Tuesday at 5 *a m* and arrive at Worcester by 11 *a m*.

Leave Worcester at 1 *p m* and arrive at Cherry Valley by 7 *p m*.

8. From Cambridge by Hoosick, Petersburgh, Berlin and Stephentown to Lebanon, once a week.

Leave Cambridge every

Leave Lebanon every

9 From Waterford by Orange & Jone's to Ballston Spa, once a week, 20 miles.

Leave Waterford every Tuesday at 6 *a m* and arrive at Ballston Spa by 11 *a m*.

Leave Ballston Spa at 2 *p m* and arrive at Waterford by 7 *p m*.

10. From Waterloo by Clyde Village to Port Glasgow, once a week.

Leave Waterloo every Friday at 6 *a m* and arrive at Port Glasgow by 6 *p m*.

Leave Port Glasgow every Saturday at 6 *a m* and arrive at Waterloo by 6 *p m*.

11. From South Nunda by M'Clure's to Ellicottsville in Cattaragus county.

Leave South Nunda every Friday at 6 *a m* and arrive at Ellicottsville by 6 *p m*.

Leave Ellicottsville every Saturday at 6 *a m* and arrive at South Nunda by 6 *p m*.

NOTES.

1. The Post-master General may expedite the mails and alter the times for arrival and departure at any time during the continuance of the contract, he stipulating an adequate compensation for any extra expense that may be occasioned thereby.

2. Fifteen minutes shall be allowed for opening and closing the mail at all offices where no particular time is specified.

3. For every thirty minutes delay (unavoidable accidents excepted) in arriving after the times prescribed in the contract, the contractor shall forfeit one dollar; and if the delay continue until the departure of any depending mail, whereby the mails destined for such depending mail lose a trip, a forfeiture of double the amount allowed for carrying the mail one trip shall be incurred, unless it shall be made to appear that the delay was occasioned by unavoidable accident; in which case the amount of pay for the trip, will, in all cases, be forfeited and retained.

4. Persons making proposals are desired to state their prices by the year. Those who contract will receive their pay quarterly—in the months of May, August, November, and February, one month after the expiration of each quarter.

5. No other than a free white person shall be employed to convey the mail.

6. Where the proposer intends to convey the mail in the body of a stage carriage, he is requested to state it in his proposals.

7. The Post-master General reserves to himself the right of declaring any contract at an end whenever one failure happens, which amounts to the loss of a trip.

9. The distance stated are such as have been communicated to this office, and some of them are doubtless incorrect; on this subject the contractor must inform himself; no alteration will be made in the pay on account of any error in this respect.

9. The contracts are to be in operation on the first day of January next; and to end December 31, 1820.

RETURN J. MEIGS, Jr. *Post-master General.*
General Post Office, Washington City, May 26, 1819.

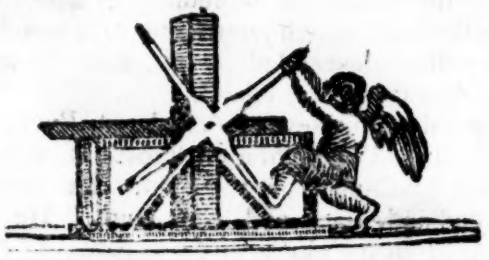
PRICE CURRENT.

Corrected Weekly, from the New-York General Price Current and Public Sales Report.

	Per	From D.	From C.	To D.	To C.	Remarks
ASHES, Pot	Ton	92	50			Dull.
—— Pearl		110				"
BEEF, Mess	bbl	9	50	9	62	
—— Prime		8		8	12	
—— Cargo		5	50			
BUTTER, first quality	lb		11		14	
—— for exportation			8			
CANDLES, mould			18		19	
—— Dipped			17			
—— Sperm			40		42	
—— Wax			60			
CHEESE, American			5		8	
CHOCOLATE, New-York			18		23	
—— Boston, No. 1			18		23	
—— Albany			20		23	
DOMESTIC GOODS,						
—— White shirting	yard		14		18	
—— Brown do			12		13	
—— 3-4 checks			16		18	
—— 7-8 do			21		22	
—— 4-4 do			21		26	
—— Stripes			16		17	
—— Plaids			16		18	
—— Bed-ticks			28		36	
—— Chambrays			14		15	
FEATHERS	lb		56		68	
FISH, Dry Cod	cwt	2	50	2	87	
—— scale		2				
—— Pickled Cod	bbl	3	50	4		
—— scale		2				
—— Salmon		15				
—— Fall mackrel No. 1		7	25	8		
—— —— No.		5	50	6		
—— —— No. 3		5				
—— Southern shad No. 1		5	50	6		
—— Connecticut mess shad		7	25	7	75	
—— Herrings		2	50	3		
FLAX	lb		18			
FLAX-SEED, clean	cask	13		13	50	
—— rough		12		13		
FLOUR & GRAIN						
—— New-York superfine	bbl.	4	50	4	62	
—— Philadelphia		5		5	12	
—— Baltimore		5		5	12	
—— Richmond		5				
—— Middlings, fine		3	25			
—— Rye flour		2	56	2	62	
—— Indian meal		3				
—— —— in hogsheads	800	15		15	50	
—— Wheat, North River	bus.		75		87	
—— —— Southern, new			94			
—— Barley			53		56	
—— Oats			37			
GLASS, Amer. 7 by 9	box	8				
—— 8 10		9				
—— 10 12		10				
GLUE	lb		10		15	
GUN-POWDER, Amer.	25lb	4		6		
—— Cannon		6		6	50	
HAMS, Virginia	lb		10		12	
—— North River			9		10	
HEMP, Water rot	Ton	150				
—— Dew rot						
HOGSLARD	lb		10			
HONEY			15		16	
HOPS 1st and 2d sort			6		8	
IRON, American	Ton	85		90		
LUMBER, Boards, oak	Mft	18				
—— North River pine		16		17		
—— Yellow pine		18		20		
—— Albany pineb'ds	pie.		18			
—— Scantling, pine	Mft	14		15		
—— —— oak		25				
—— Oak timber	sd.ft		20		25	
—— Shingles, cypress	1000	4				
—— —— pine		3		3	50	
—— Staves, pipe		54				
—— —— hhd		43				
—— —— bbl		22				
—— —— R O hhd		25				
—— Hhd heading		50				
—— —— hoops		25		30		
OIL, Linseed	gal		96			
PLAISTER of PARIS	Ton	4	75			
PORK, Cargo	bbl	9		9	50	
Prime		10	75	11		
Mess		13	75	14		
SOAP White	lb		13		15	
Brown			9		11	
WAX, Bees			55		60	
Tallow			31		32	

New-York, July 4, 1820.

ENGRAVING,



And Copperplate Printing.

THE Subscriber continues the engraving and Copperplate printing, in its various bsauches, at No. 82, State-street. Having for several years printed the bills of the principal banks in this state, whose patronage he continues to receive, from a conviction that, by his care of their plates, he yields them two thousand impressions more than they formerly received, he can offer no better recommendation to the public for the faithful execution of all printing in his line, that they may please to favour him with.

L. LEMET.

Albany, July 17, 1819.

$40,000.

By authority of Congress.

NATIONAL LOTTERY.

SECOND CLASS.

SCHEME.

100	Prizes of D.	1,000	is	D. 100,000
1	Prize of	40,000		40,000
2	do.	10,000		20,000
4	do.	5,000		20,000
20	do.	500		10,000
60	do.	100		6,000
2,600	do.	40		104,000
				D. 300,000
10,000	Tickets, at 30 dolls.			300,000

PRIZES ALL FLOATING.

First 1,000 Blanks entitled to 40 dollars each.
2 Prizes of 5,000 floating from 1st day's drawing.

1	do.	5,000	do 5th	do.
1	do.	5,000	do. 7th	do.
1	do:	10,000	do. 10th	do.
1	do.	10,000	do. 16th	do.
1	do.	40,000	do. 19th	do.

The drawing of 500 Tickets is called a day's drawing, and will regulate that of the above prizes.

The drawing will commence at the city of Washington, in the month of October next, positively, unless the sale of Tickets will allow it to be done *sooner*.

Cash will be promptly advanced for prizes, at either of D. GILLESPIE'S United States Lottery Office, No. 114 Broadway, opposite the City Hotel, New-York; No. 11 South Third, between Chesnut and Market-streets, Philadelphia; and Pennsylvania Avenue, City of Washington.

This splendid Lottery being under the authority of the United States, and the prizes all floating as specified, offers the greatest inducements to venders and adventurers. As the tickets can be sold in any part of the United States, orders (post paid) forwarded to the subscriber at either of the above offices, from venders, associates, or individuals, for Tickets or chances, will receive thankful attention, from

D. GILLESPIE.

*** Present retail price of Tickets, 32 dollars.

Sale of Land for Taxes.

State of New-York—Comptroller's Office.

PUBLIC Notice is hereby given, that lists of certain lands liable to be sold for taxes, have been forwarded to the several counties in this state, in order to be deposited in the several county treasurers' and town clerks' offices, respectively, for the information of all persons concerned; and that the said lists may be examined at either of the said offices, at all reasonable hours: And notice is hereby also given, that on *Thursday, the seventh day of October next*, at ten o'clock in the forenoon, at the capitol, in the city of Albany, and on the next succeeding days, I will sell at public auction, to the highest bidder, so much of each lot, piece or parcel of land mentioned and described in the said lists, as will be necessary to pay all taxes, interest and charges now due, or that may grow and may be due thereon at the time of sale.

The conditions of sale will be, that the purchasers within forty-eight hours after the sale, pay the purchase moneys and receive certificates of their purchases; and that after the expiration of two years from the date of their certificates, they receive conveyances for the lands purchased by them respectively, unless the owners, or those claiming to be such, of the lands so purchased, shall, previous to the expiration of the said two years, pay to the comptroller, for the use of the said purchasers, their heirs and assigns, the amount of the purchase moneys, with interest, at the rate of twenty per centum per annum.—The lands sold to be subject to all claims of the state thereon. And in case any land to be purchased at the said sale and that may be conveyed in pursuance thereof, shall at the time of conveyance be in the actual possession and occupancy of any person or persons, the title of the purchaser shall then and in that case be subject to the stipulations and provisions of the fifth section of the act, entitled "an act to repeal in part the act, entitled "an act providing more effectually to ascertain and determine the true value of real estates within this state, and for other purposes," and further to amend the act for the assessment and collection of taxes" passed April 13, 1819.

ARCH'D. M'INTYRE, Comptroller.

Albany, May 27th, 1819.

☞ Persons who may have made payments into the treasury for taxes, and omitted to have their receipts presented at the comptroller's office to have them entered and countersigned as required by law, are advised to present them in order to be so entered and countersigned before the day of sale; or that in case of failing to do so, their lands will be sold, and they thereafter be deprived of the benefit of all such payments.

Payments for taxes cannot be received on the days of sale, nor for two days prior to the sale.

AN APPRENTICE WANTED.

A SMART, active lad, about 13 or 14 years of age, wanted as an apprentice to the Watch Making business. None need apply unless well recommended, and one from the country would be preferred. Enquire at No. 437, South Market-street, of ALEXANDER M'HARG.

Albany, July 2, 1819.

PHYSIOGNOTRACE.

LIKENESSES ENGRAVED.

L. LEMET,

RESPECFULLY informs the ladies and gentlemen of Albany, that he takes likenesses in Crayon as large as life, and engraves them of a reduced size in a new and elegant style. The price of the large likenesses, with an engraved plate and twelve impressions, is 25 dollars for gentlemen, and 35 dollars for ladies, or 8 dollars for the drawing only.

For further particulars apply at his house, No. 32 State-street, where a great number of portraits of distinguished characters may be seen.

June 5, 1819.

EAGLE AIR FURNACE.

ORDERS for this Furnace may be left at THOMAS GOULD's, No. 63, State-street, or at the Furnace, No. 84, Beaver-street, where strict attention is paid by one of the proprietors; who has

CONSTANTLY ON HAND,

Potash Kettles, from 18 to 55 dollars; Bark Mills, of late improvement; large and small Caldrons; Oven and Close Stoves, and Castings in general.

PATTERNS.

This Furnace is furnished with a general assortment of Patterns, among which are Patterns of latest improvement for Merchant and Country Mills, Cotton and Carding Machinery, &c. Patterns of any description furnished on the shortest notice.

Warner Daniels and Co.

N. B. A constant supply of LIVERPOOL and VIRGINIA COAL, for family and smith's use.

Albaay, June 5, 1819.

ALBANY: PRINTED FOR THE EDITOR,

BY JOHN O. COLE.

☞ COMMUNICATIONS, SUBSCRIPTIONS, and ADVERTISEMENTS, for this paper, and PRINTING JOBS, of every description, which will be neatly executed, at fair prices, received at the Post Office. All letters from abroad, directed to the Postmaster, Albany, will be duly attended to.

TERMS.

THREE DOLLARS PER ANNUM, PAYABLE IN ADVANCE